which is rather fine; last whorl half the length of the shell, its suture considerably below the periphery of the preceding whorl, giving the shell a constricted appearance in the middle. Aperture rather small, obliquely ovate; lip thin, thickening anteriorly, and passing into the base of the columella which is twisted into a strong fold; this part of the peristome is of a red-brown color, as is the area immediately surrounding the base of the columella.

The holotype (U.S.N.M. no. 125556), which was collected at Corpus Christi Bay, Texas, by J. A. Singley, measures 3.6 mm. in height, and 1.6 in width. A paratype from the same lot measures: height 4 mm., width 1.7 mm.

This is very close to Sayella hemphilli Dall, from Cedar Keys, Florida, but is less inflated, and has a constricted appearance in the penultimate whorl, mentioned in the description above. The examination of more material, however, from the region between the localities of the two species, may show that the two forms are actually one.

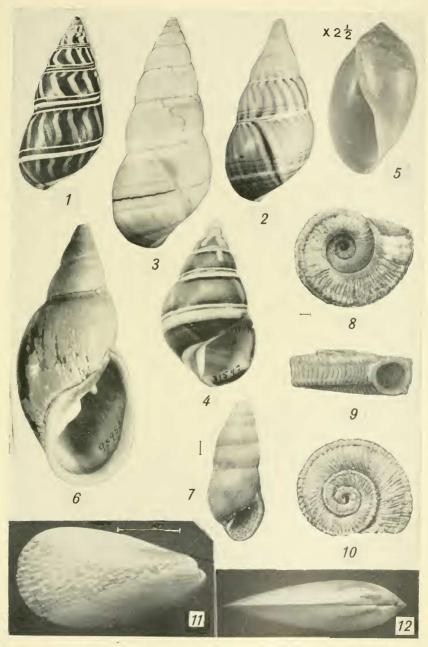
Dall placed Sayella in the Ellobiidae, but it seems that they really belong in the Pyramidellidae, and near the group that has been called Syrnola, containing S. fusca C. B. Adams, producta C. B. Adams, and related species. Bartsch referred these species to Syrnola with some doubt, and it seems probable that they should be removed from this genus, which has as a type a Japanese species of quite different appearance. It is possible that these species will find a place in the genus Sayella; a problem, however, that for the present I will not attempt to solve.

WEST AMERICAN SPECIES OF GONIOBASIS, WITH DESCRIPTIONS OF NEW FORMS

JUNIUS HENDERSON

Goniobasis orickensis, new species. Plate 4, fig. 10.

Shell solid, much resembling an elongate, slender *G. circumlineata* Tryon; surface dull, growth lines coarse; young specimens and upper whorls of adults dark reddish brown, due to coalescence of two or more dark color bands, often with a lighter band just below the suture; lower whorls horn colored, light brown or with a slight greenish cast, bands obsolete except a dark



1, Liguus blainianus pilsbryi Cl. 2, L. flammellus russeli Cl. 3, L. fasciatus mariae Cl. 4, L. fasciatus deckerti Cl. 5, Physa gouldi Cl. 6, Placostylus acutus Cl. 7, Sayella livida Rhdr. 8–10, Pseudomalaxis lamellifera Rhdr. 11, 12, Modiolus sagittatus Rhdr.



red basal band persisting internally and showing as a large terminal spot within the aperture at base of columella on nearly all but the largest specimens; whorls probably 9 or 10 (no complete adults available), somewhat convex; suture well impressed; a very few young examples with apex nearly complete show several rude, irregular axial plicae, lacking in most specimens; many examples exhibit a few spiral striae, with flat bands between, much as in *circumlineata*; aperture white within, or marked with brownish-red bands, especially in the young; columella usually purple.

Holotype, from Redwood Creek, Orick, California, University of Colorado Museum, No. 17710-a, a slender example: Alt. 20 mm., with several whorls wanting, probably original length about 23 mm. or more; diam. 11.5 mm. Many topotypes, same collection. Figured specimens, same collection, No. 17703-a, from a creek 26 miles east of Arcata, California, by winding mountain road, almost certainly Redwood Creek: Alt. 24.5 mm., several apical whorls missing; diam., 10 and 9 mm. respectively. It is abundant at both localities. We found it also in Willow Creek, Trinity River drainage, next valley east of Redwood Creek, and in a small creek 7 miles north of Orick.

This species differs from G. yrekensis in the absence of regular plicae, in surface texture, and in the presence of the conspicuous red spot at the base of the columella. It differs from G. circumlineata in the red spot, color bands and its more slender form. It differs from G. shastaensis Lea, from the Umpqua River in its lack of more or less regular spiral threads and lack of numerous regular axial plicae on the upper whorls. It is larger, more robust than the form identified as G. draytonii Lea, from California, and in the color bands, red spot and rougher surface. It is confined to the drainage indicated herein, so far as I know.

Goniobasis coquillensis, new species. Plate 4, fig. 6.

Shell small, slender, graceful; color tan, with a broad, brown peripheral band; whorls 9 or 10, quite convex, suture deeply impressed; some examples with a few obscure axial plicae on the uppermost whorls, which are usually quite smooth; last 3 whorls closely wound with fine, rather regular, threadlike striae, sometimes a little stronger just below the suture, often somewhat decussated by fine growth lines; aperture roundly ovate, nearly

one-third the total length of shell, white within; outer lip scarcely sinuous.

Holotype, University of Colorado Museum, No. 21167-a, creek at Riverton, on Coquille River, Oregon: Alt. 16 mm.; diam. 5.5 mm.; length of aperture 5 mm.; width 4 mm. Figured paratypes, same collection and locality, No. 21168-b. Topotypes examined by me, possibly from same creek, labelled "creek W. of Riverton Mine, Riverton, Ore.," in the Hannibal collection at Stanford University. Other localities, Hannibal collection, Stanford: a small creek at Coquille; Five Mile Creek, Coos Bay; creek at Blacklock Point, Cape Blanco; Hubbard Creek, three-fourth mile south of Port Orford; head of west branch of South Slough, Coos Bay; and Five Mile Creek, south of Bandon; all in Oregon.

Typically this form seems to be confined to the Coquille River drainage, flowing into Coos Bay, and small streams flowing into the ocean southward to Port Orford. It is readily distinguished from G. shastaensis Lea from the Umpqua drainage and southward, by its much smaller size, more slender form, more convex whorls, deeper suture, and almost total absence of plicae and striae from the upper whorls. At Riverton, I obtained in the Coquille River a fine lot of about the same general appearance and characters, except that all but the last two whorls are regularly and rather strongly plicate, seeming possibly to connect coquillensis with shastaensis as a subspecies. Two of them are figured for comparison Plate 4, fig. 7. Many lots of shastaensis have much weaker plicae than the typical form, but differ from coquillensis in other respects, and are readily distinguished even in colonies within the range of coquillensis south of Bandon.

Goniobasis chacei, new species. Plate 4, figs. 8, 9.

Shell quite small, slender, rather smooth; surface dull or somewhat polished; color medium to dark brown, often with a broad, obscure, darker peripheral band, which shows more clearly within the aperture; whorls 7 or 8, less convex and much smoother than in G. coquillensis (which it resembles in size and shape) and suture less deeply impressed; apical whorls mostly with a few rude, irregular axial plicae; last 2 or 3 whorls with 3 or 4 fine striae just below the suture, and usually a few very much finer striae below them; growth lines scarcely discernable on some